

REMARKS

This Application has been carefully reviewed in light of the Office Action mailed November 19, 2002. In order to advance prosecution of this case, Applicants amend Claim 16 and add Claims 24-31. Applicants respectfully request reconsideration and favorable action in this case.

Section 102 Rejections

The Examiner rejects Claims 1-2, 4-10, 12-17, and 19-23 under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,317,414 issued to Naohiro ("Naohiro"). Claim 1 recites:

In an ATM network having a plurality of paths to a common destination, a method comprising:

receiving ATM traffic from a traffic source as a plurality of copies of traffic routed along a plurality of paths, each one of the paths having a receive circuit;

configuring an ATM switch to provide a route to a common destination for each one of the paths;

determining a qualified copy of the traffic; and

discarding all copies of the traffic except for the qualified copy such that only the qualified copy is passed to the ATM switch for routing to the common destination. (emphasis added)

Naohiro fails to disclose every limitation of Claim 1. In the system of Naohiro, the switch receives all copies of the traffic. In the Examiner's words, "[t]he selector 5-7 selects the virtual path that will continue on to 5-8." However, Claim 1 recites discarding copies "such that only the qualified copy is passed to the ATM switch." Consequently, Naohiro does not disclose every element of Claim 1.

Support for this characterization of Naohiro can be found repeatedly in the illustrations and the specification. For

example, Figure 1 shows a switch 5-7 that receives and switches between two copies of traffic on the system as indicated in the accompanying description in the specification. (". . . [T]he VP AIS detecting portion 5-5 detects the VP AIS of the VP1 and a VP switch (2 to 1 selector) 5-7 selects the VP1, the VP switch 5-7 is automatically switched to the VP2 . . ." col. 6, ll. 54-58)

Similarly, Figures 4-9 all show two or more copies of traffic passing through the system. The descriptions accompanying these figures also support this characterization of Naohiro. (". . . as shown in FIG. 4, using a selector (a 2 to 1 selector) 1-20 for selecting one signal of two signals on a reception side as a selected signal 1-27." col. 9, ll. 22-25; ". . . as shown in FIG. 5, using a selector (in the figure, a 3 to 1 selector is illustrated) 1-26 for comparing more than three signals of candidates in parallel with each other and selecting a signal that operates most normally as a selected signal 1-27, . . ." col. 9, ll. 18-22.). Clearly, Naohiro does not disclose a system in which "only the qualified copy is passed to the ATM switch for routing to the common destination."

Thus, Naohiro does not disclose, teach, or suggest every element of Claim 1. Therefore, Applicants respectfully request allowance of Claim 1 and all its dependents.

Claim 9 recites:

An apparatus in a network having a plurality of paths to a destination, comprising:

a plurality of receive circuits operable to receive ATM traffic from a traffic source as a plurality of copies via a plurality of paths, the receive circuits operable to qualify signals on the paths to designate a particular receive circuit as

active such that each other receive circuit discards its respective traffic; and

an ATM switch configured to provide a route to a destination for each one of the paths, the ATM switch operable to route traffic from the active receive circuit to the destination.

*Naohiro* fails to disclose receive circuits "operable to qualify signals on the paths to designate a particular receive circuit as active such that each other receive circuit discards its respective traffic." Both qualified and non-qualified copies of traffic travelling through the system of *Naohiro* reach the switch as shown in Figure 1, neither is discarded. The detection sections of *Naohiro* do not disclose the "receive circuits" of Claim 9 as contended by the Examiner. The only function attributed to the detection sections by *Naohiro* is to "monitor normality of the VP1 and VP2 input through different routes" and to detect an Alarm Indication Signal (AIS) on their respective Virtual Path (VP). Col. 6, ll. 51-55. Thus, *Naohiro* fails to disclose every element of Claim 9. Therefore, Applicants respectfully request allowance of Claim 9 and its dependents.

As amended, Claim 16 recites:

A program embodied in computer-readable media and operable to perform the following steps:

receiving, at a receive circuit, ATM traffic from a traffic source as one of a plurality of copies of traffic routed along a plurality of paths;

determining, at the receive circuit, whether the received copy is a qualified copy of the traffic;

discarding the received copy if the received copy is not the qualified copy; and

communicating the received copy from the receive circuit to an ATM switch for routing to a

destination only if the received copy is the qualified copy.

*Naohiro* does not disclose "communicating the received copy from the receive circuit to an ATM switch for routing to a destination only if the received copy is the qualified copy." As noted above with respect to Claim 1, *Naohiro* does not disclose communicating the received copy to an ATM switch "only if the received copy is the qualified copy." Thus, *Naohiro* fails to disclose every element of Claim 16. Therefore, Applicants respectfully request allowance of Claim 16 and its dependents.

**Section 103 Rejections**

The Examiner rejects Claims 3, 11, and 18 under 35 U.S.C. § 103(a) as being unpatentable over *Naohiro* in view of U.S. Patent No. 6,424,629 issued to Rubino, et al. ("*Rubino*"). Claims 3, 11, and 18 all depend from allowable claims as shown above. Therefore, Applicants respectfully request allowance of Claims 3, 11, and 18.

**New Claims**

Applicants add Claims 24-31, which are fully supported by the originally filed specification. For the reasons stated above, Applicants respectfully request allowance of new Claims 24-31.

CONCLUSIONS

Applicants have made an earnest attempt to place this case in condition for allowance. For the foregoing reasons, and for other reasons clearly apparent, Applicants respectfully request full allowance of all pending Claims. If the Examiner feels that a telephone conference or an interview would advance prosecution of this Application in any manner, the undersigned attorney for Applicants stands ready to conduct such a conference at the convenience of the Examiner.

A check in the amount of \$312.00 is attached to cover the fee for additional claims. No other fees are believed to be due, however, the Commissioner is hereby authorized to charge any fees or credit any overpayments to Deposit Account No. 02-0384 of Baker Botts L.L.P.

Respectfully submitted,

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Marked-Up Version of Claim Amendments

For the convenience of the Examiner, all claims have been presented whether or not an amendment has been made. The claims have been amended as follows:

IN THE CLAIMS

Please amend the claims as follows.

1. In an ATM network having a plurality of paths to a common destination, a method comprising:

receiving ATM traffic from a traffic source as a plurality of copies of traffic routed along a plurality of paths, each one of the paths having a receive circuit;

configuring an ATM switch to provide a route to a common destination for each one of the paths;

determining a qualified copy of the traffic; and

discarding all copies of the traffic except for the qualified copy such that only the qualified copy is passed to the ATM switch for routing to the common destination.

2. The method of Claim 1, wherein determining comprises receiving management cells on a path indicating an alarm indication signal (AIS) or loss of continuity (LOC).

3. The method of Claim 1, wherein determining comprises detecting a loss of a keep-alive signal at one of the respective receive circuits.

4. The method of Claim 1, wherein determining is based upon the following criteria:

alarm indication signal (AIS),  
loss of continuity (LOC), or  
missing terminating circuit card; thereafter  
high bit error rate (BER).

5. The method of Claim 1, wherein discarding comprises responding to qualifying information regarding the quality of virtual path (VP) copies to determine which VP copy is to be switched through and which is to be discarded at the respective receive circuit.

6. The method of Claim 1, wherein determining comprises communicating information related to qualifying between the respective receive circuits.

7. The method of Claim 1, wherein the paths comprise a first path in a first direction around a SONET UPSR and a second path in a second direction around the SONET UPSR.

8. The method of Claim 1, wherein the ATM switch is configured to route ATM traffic for a given virtual path (VP) from each respective receive circuit to the common destination.

9. An apparatus in a network having a plurality of paths to a destination, comprising:

a plurality of receive circuits operable to receive ATM traffic from a traffic source as a plurality of copies via a plurality of paths, the receive circuits operable to qualify signals on the paths to designate a particular receive circuit as active such that each other receive circuit discards its respective traffic; and

an ATM switch configured to provide a route to a destination for each one of the paths, the ATM switch operable to route traffic from the active receive circuit to the destination.

10. The apparatus of Claim 9, wherein each receive circuit is operable to receive management traffic on a path indicating a degradation or loss in signal.

11. The apparatus of Claim 9, wherein each receive circuit is operable to detect a loss of a keep-alive signal of another receive circuit.

12. The apparatus of Claim 9, wherein the receive circuits communicate information related to traffic qualification.

13. The apparatus of Claim 9, wherein the ATM switch is configured to route ATM traffic for a given virtual path (VP) from each receive circuit to the destination.

14. The apparatus of Claim 9, wherein the receive circuits qualify signals based upon the following criteria:  
alarm indication signal (AIS),  
loss of continuity (LOC), or  
missing terminating circuit card; thereafter  
high bit error rate (BER).

15. The apparatus of Claim 9, wherein the paths comprise a first path in a first direction around a SONET UPSR and a second path in a second direction around the SONET UPSR.

16. (Amended) A program embodied in computer-readable media and operable to perform the following steps:

receiving, at a receive circuit, ATM traffic from a traffic source as one of a plurality of copies of traffic routed along a plurality of paths;

determining, at the receive circuit, whether the received copy is a qualified copy of the traffic;

discarding the received copy if the received copy is not the qualified copy; and

communicating the received copy from the receive circuit to an ATM switch for routing to a destination only if the received copy is the qualified copy.

17. The program of Claim 16, wherein determining comprises receiving management traffic at the receive circuit indicating an alarm indication signal (AIS) or loss of continuity (LOC).

18. The program of Claim 16, wherein determining comprises detecting a loss of a keep-alive signal.

19. The program of Claim 16, wherein determining is based upon the following criteria:

alarm indication signal (AIS),

loss of continuity (LOC), or

missing terminating circuit card; thereafter

high bit error rate (BER).

20. The program of Claim 16, wherein discarding comprises responding to qualifying information regarding the quality of virtual path (VP) copies to determine whether a VP copy received at the receive circuit is to be switched through or discarded.

21. The program of Claim 16, wherein determining comprises communicating information related to qualifying to another receive circuit.

22. The program of Claim 16, wherein the paths comprise a first path in a first direction around a SONET UPSR and a second path in a second direction around the SONET UPSR.

23. The program of Claim 16, wherein the ATM switch is configured to route ATM traffic for a given virtual path (VP) from each of the paths to the destination.

Please add the following new claims.

24. **(New)** A system for communicating data, comprising:  
a traffic source operable to communicate data as a plurality of copies via a plurality of paths,  
a plurality of receive circuits, the receive circuits operable to receive data from the traffic source on the plurality of paths and operable to qualify data on the paths to designate a particular receive circuit as active such that each other receive circuit discards its copy of the data; and  
an ATM switch configured to provide a route to a destination for each one of the paths, the ATM switch operable to route traffic from the active receive circuit to the destination.

25. **(New)** The system of Claim 24, wherein each receive circuit is operable to receive management traffic on a path indicating a degradation or loss in signal.

26. **(New)** The system of Claim 24, wherein each receive circuit is operable to detect a loss of a keep-alive signal of another receive circuit.

27. **(New)** The system of Claim 24, wherein the receive circuits communicate information related to traffic qualification.

28. **(New)** The system of Claim 24, wherein the ATM switch is configured to route ATM traffic for a given virtual path (VP) from each receive circuit to the destination.

29. (New) The system of Claim 24, wherein the receive circuits qualify signals based upon the following criteria:

alarm indication signal (AIS),  
loss of continuity (LOC), or  
missing terminating circuit card; thereafter  
high bit error rate (BER).

30. (New) The system of Claim 24, wherein the paths comprise a first path in a first direction around a SONET UPSR and a second path in a second direction around the SONET UPSR.

31. **(New)** A system for communicating data, comprising:  
means for receiving ATM traffic from a traffic source as  
a plurality of copies of traffic routed along a plurality of  
paths, each one of the paths having a receive circuit;  
means for configuring an ATM switch to provide a route to  
a common destination for each one of the paths;  
means for determining a qualified copy of the traffic;  
and  
means for discarding all copies of the traffic except for  
the qualified copy such that only the qualified copy is passed  
to the ATM switch for routing to the common destination.